

Sussex County Man Tests Positive for West Nile Virus

DOVER – The Division of Public Health (DPH) is announcing that a 60-year-old Sussex County man has tested positive for the state's first human case of West Nile Virus (WNV) in 2018. The man was briefly hospitalized for illness in July and after a preliminary positive test result from the DPH Laboratory in Smyrna, the blood sample was sent to the Centers for Disease Control and Prevention (CDC) for confirmatory testing. WNV, a mosquito-borne illness, can become serious, and DPH reminds people to take precautions to avoid mosquito bites. In 2017, one case of WNV was confirmed in a Kent County woman, the first such case in two years in Delaware.

The Department of Natural Resources and Environmental Control (DNREC) Mosquito Control Section has seen an increase of WNV found in wild birds and sentinel chickens. The first case of WNV in birds this year was detected in late June in a wild crow collected in Sussex County by DNREC's Mosquito Control section. WNV-positive sentinel chickens have been found at 10 of the 20 Mosquito Control Section sentinel chicken stations around the state, with virus-positive stations now in all three counties, and 13 WNV-positive wild birds have also been collected from all three counties. The increase in WNV detection in birds is occurring at about twice the normal rate, according to DNREC Mosquito Control officials.

"With the appearance of this disease in a person, along with an accompanying increase of West Nile Virus in wild birds, we want to urge everyone to protect yourself and your loved ones from mosquito bites. These bites can cause much more serious health problems than just itching and discomfort," said DPH Director Dr. Karyl Rattay. "This is an early start to the transmission season for West Nile Virus, and it is concerning that we could see more cases this year in humans than in past

years.”

WNV and EEE are transmitted by mosquitoes, generally in summer and fall, with a peak period for disease transmissions from mid-August to mid-October. Although nearly 80 percent of people infected with WNV will not become ill, and only a little less than 20 percent of those infected will develop West Nile fever, with mild symptoms (fever, headache, body aches, a skin rash on the chest or back and swollen lymph glands), one in 150 people infected will develop severe infection (West Nile encephalitis or meningitis).

Symptoms of severe WNV infection include headache, high fever, stiff neck, and/or tremors and muscle weakness. The elderly and those with weakened immune systems are most at risk. Anyone who experiences any of these severe symptoms should seek medical help immediately. Symptoms may progress to stupor, disorientation, coma, convulsions, paralysis, and possibly death.

WNV is primarily transmitted to humans by the common house mosquito, while the Asian tiger mosquito can also carry the disease. Mosquitoes in Delaware can also carry viruses that may result in death, including Eastern equine encephalitis (EEE), which can cause brain inflammation and be fatal to humans and horses, and dengue virus.

Earlier this month, DNREC’s Mosquito Control Section found Delaware’s first EEE-positive sentinel chicken for 2018 in a station in Sussex County. Like WNV, EEE can adversely affect both humans and horses – EEE is more severe than WNV, but fortunately much rarer. Heightened concerns over possible transmission to humans from both viruses, will continue into mid-October, until cooler temperatures start to significantly slow down both mosquito and virus activity.

Other mosquito-borne diseases that could occur in Delaware include chikungunya, which while rarely fatal, may result in

severe and debilitating symptoms, including fever and joint pain, and Zika. The most common symptoms of Zika are rash, fever, joint pain, and conjunctivitis (red eyes). The largest health impact of the Zika virus appears to be on infants whose mothers were infected during pregnancy. There have been reports of a serious birth defect of the brain called microcephaly, a condition in which a baby's head is smaller than expected when compared to babies of the same sex and age, as well as other poor pregnancy outcomes in babies of mothers who were infected with Zika virus while pregnant. To date, no cases of Zika in the state have been linked with local mosquito or human transmission.

DNREC's Mosquito Control Section dealt with a statewide eruption of adult mosquitoes from late May through the end of June, occurring primarily in inland areas and caused by heavy rainfall. For the past two weeks the agency has faced another onslaught of adult mosquitoes in coastal areas attributable largely to tidal flooding and rains. To help the Section combat swarming numbers of mosquitoes this year, and to reduce mosquito-breeding habitat for mosquitoes that can transmit WNV, DNREC urges homeowners to practice good water sanitation on their property by eliminating standing water, particularly as might be collected in buckets, containers, uncovered trash cans, stagnant bird baths, old tires, and unused swimming pools.

To avoid mosquito bites and reduce the risk of infection, individuals should also:

- When outside, wear shoes, light-colored long-sleeved shirts and pants. Mosquito netting can protect one's face and neck, and infants in carriages, strollers, and playpens. Mosquitoes are most active at dusk and during the early-morning hours.
- Use Environmental Protection Agency (EPA)-registered insect repellents. Follow the manufacturer's instructions for reapplication times.
- Do not use insect repellent on babies younger than 2 months

of age.

- Dress your child in clothing that covers arms and legs. Do not apply insect repellent onto a child's hands, eyes, mouth, or on cut or irritated skin. Adults: Spray insect repellent onto your hands and then apply to the child's face.
- Prevent mosquitoes from entering the house by using screens and keeping windows and doorways tightly sealed.

While there are no vaccines against WNV or EEE for humans, effective EEE and West Nile vaccines are available for horses through veterinarians, according to the Delaware Department of Agriculture's State Veterinarian's Office. Both WNV and EEE cause severe, and sometimes fatal, infections in horses. Signs of infection in horses include fever (although not always with WNV), anorexia, head pressing, depression or personality change, wobbling or staggering, weakness, blindness, convulsions, muscle spasms in the head and neck, or hind-limb weakness. If owners notice any of these signs in their horses, they should contact their veterinarian immediately.

To report suspected cases of human WNV, call the DPH Office of Infectious Disease Epidemiology at 888-295-5156.

For more information about:

- Mosquito biology/ecology and control – Contact the Mosquito Control Section's Dover office at 302-739-9917.
- Reporting WNV-suspect wild birds, or for requests for mosquito relief – For upstate areas from Dover north, contact Mosquito Control's Glasgow field office at 302-836-2555; for downstate areas south of Dover, contact Mosquito Control's Milford field office at 302-422-1512.
- WNV or EEE in horses and equine vaccines – Contact the Department of Agriculture's Poultry and Animal Health Section at 302-698-4500 or 800-282-8685 (Delaware only).
- For more information on West Nile virus or Eastern equine encephalitis – Visit the CDC website, www.cdc.gov/ncidod/dvbid/westnile/index.htm

A person who is deaf, hard-of-hearing, deaf-blind or speech-disabled can call the DPH phone number above by using TTY services. Dial 7-1-1 or 800-232-5460 to type your conversation to a relay operator, who reads your conversation to a hearing person at DPH. The relay operator types the hearing person's spoken words back to the TTY user. To learn more about TTY availability in Delaware, visit <http://delawarerelay.com>.

Delaware Health and Social Services is committed to improving the quality of the lives of Delaware's citizens by promoting health and well-being, fostering self-sufficiency, and protecting vulnerable populations. DPH, a division of DHSS, urges Delawareans to make healthier choices with the 5-2-1 Almost None campaign: eat 5 or more fruits and vegetables each day, have no more than 2 hours of recreational screen time each day (includes TV, computer, gaming), get 1 or more hours of physical activity each day, and drink almost no sugary beverages.